

12. (Previously Presented) A computer system, comprising a decoder according to Claim 10, and further comprising:

at least one hard disk, and

at least one means for reading said hard disk.

13. (Previously Presented) Non-removable data storage means, comprising computer program code instructions for the execution of the steps of a method according to Claims 1 or 2.

14. (Previously Presented) Partially or wholly removable data storage means, comprising computer program code instructions for the execution of the steps of a method according to Claims 1 or 2.

(Currently Amended)  
15. ~~(Previously Presented)~~ A computer-readable medium storing computer

executable code for program, containing instructions such that, when said program controls  
a programmable data processing device, said instructions lead to said data processing  
device implementing a method according to Claims 1 or 2 of decoding a one-point  
algebraic geometric code of dimension  $k$  and length  $n$ , wherein, in order to identify a  
position of errors in a received word, a syndromes matrix  $S$ , of size  $(n - k) \times (n - k)$ , is  
defined, of which elements  $S_{ij}$  of each line  $i$  are calculated, for  $j$  between 1 and  $w(i)$ ,  
wherein boundary  $w$  is a decreasing function, using syndrome  $s$  of the received word,